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PHILOSOPHY OF EDUCATION.

BERTHA PAYNE.

THE general study of play, begun in the fall quarter, has been the point of departure for a closer study of mental development through play and work, the relation of mind and body, and the reaction of mental upon bodily states, and *vice versa*.

We first summed up roughly the elements which usually enter into children's play employments. Each member of the class described a play that he had seen, indicating the exhibition at various stages of impulse, instinct, imitation, discovery, experiment, invention, purpose, and plan. A typical record is given below by way of illustration.

I noticed a little boy take a picture chain from his pocket — stimulus. His impulse was to attach it to something. By accident he placed the chain over a horizontal bar. He then discovered that by pulling one end of the chain he raised the other. This was something like an elevator. His next step was imitation — making it more like an elevator. He placed his lunch basket on one end of the chain and filled it with papers for cargo. Imagery of past experiences with elevators furnished material for his building. He now had a definite purpose — to make as good an imitation elevator as possible. A place for unloading was made some distance from the floor, and inventive situations requiring other children to load and unload were brought in. — *Marion Hopkins*.

A child sees a pool of water, and his first impulse is to throw something into it. He acts instinctively, entering upon a form of activity without any definite aim. He sees that the light piece of wood which he has thrown in floats, while some things sink. He discovers that the piece of wood is like a boat. Imagery is extended to other floating things. Invention begins when he plans a toy boat. Experiment and imitation appear when he tries to make a boat similar to those he has seen, to balance it, and to fit its parts together. — *Helen Morrison*.

Observation of the force of impulsive movement in play led to a study of impulse and sensation. To simplify the problem, we reviewed the mental and physical condition of a child in earliest infancy in the following order :

- (1) Outward signs of mental life.
- (2) Mental movement that may be inferred from these signs.
- (3) Facts of mental life as given by Preyer and Baldwin.
- (4) Physiological equipment at birth — brain, spinal cord, nerves.
- (5) Froebel's conception of the meaning of infancy.

Some attention was given to the following :

(1) Spontaneous movements. (2) Automatic movements. (3) Reflex movements. (4) Acquired reflexes. (5) Controlled movements in response to stimuli received from eye, ear, touch, etc. (6) Co-ordination of movements. (7) Co-ordination or association of perceptions and appropriate movements. (8) The process of learning to direct movement through gradual command of what was at first involuntary or spasmodic. (9) The larger acquisition of percepts and images through self-initiated movements. (10) The meaning of self-activity in this earliest acquisition of knowledge and of powers. (11) Froebel's statement of this as "self-consciousness." (12) Types of imagery : visual, auditory, motor, tactile, olfactory, and gustatory. (13) Localization of function.

REFERENCES : Froebel, *Education of Man*; Preyer, *Infant Mind*; Baldwin, *Mental Development, Methods and Processes*; Warner, *The Study of Children*; James, *Psychology*; Halleck, *Education of the Central Nervous System*.

As a result of this study of the development and differentiation of psychic processes, several stages have been noted. These stages are significant to the teacher, not because she deals with the education of infants, but because they illustrate the upward spiral of growth. The necessity of full and complete exercise and nutrition at each stage, that the succeeding stage may follow at its best, is a physiological and psychological demonstration of Froebel's precept : "Give to each stage that which the stage demands."

The first stage with which the school is directly concerned is that of play merging into work, or, at the youngest kindergarten age, pure play, imitative, experimental, dramatic, and constructive. Leading up to this stage we note the following :

1. Period of spontaneous and reflex movement through which sensations, percepts, stimulus to controlled movement, and power of control begin to be acquired.

2. Period of increased sense-perception, image-forming, and acquisition of co-ordinated movement ; sense of personality begins to show in response to touch and presence of different individuals.

3. Interpretation of world of objects in real significance ; recognition of persons ; memory ; discovery of personal agency in producing effects.

4. Speech and locomotion enlarge the world of experiences ; imitation furnishes new modes of control and a larger acquaintance with persons and their feelings and desires ; stronger bond between self and others.

5. Interpretation of the world of persons and things through imitation, dramatization, and creation of new meanings for familiar objects ; play in its

higher sense; discovery of new uses and combinations; selection of means to an end.

6. Forming ends to be reached by processes which may or may not be pleasurable in themselves; means are tried and rejected or modified, involving deliberation, comparison, judgment, and conscious plan; the more remote the end, and the less it is pursued for the enjoyment of the process of realization, the more the work element enters and play retires.

An incidental study was made of the children in the school. Each student spends an hour a day in the elementary school, either teaching or observing. This has given a good opportunity for watching the reaction of children to the various stimuli presented in every form of study. The class studied the predisposition of children to response, dividing them for convenience into motor and receptive, or passive, types. A great number were left in the middle or normal class. This led to the analysis of causes of the apparent passivity which was scheduled by the class as due in many instances to one or more of the following conditions:

(1) Timidity; (2) physical condition, as lack of nutrition, or fatigue; (3) lack of experience on the subject in hand, when responsive in some subjects and not in others; (4) deficiency in some type of imagery, as when unresponsive in certain forms of expression and not in others; (5) general dulness or slowness, where stimulus is not easily turned into action.

Questions :

1. What arguments have you on the physiological side for the use of all forms of expression in school? On the mental side?
2. What is the special reaction of each form of expression upon imagery?
3. What use can be made of your knowledge of types of imagery with different children in your group?
4. What answer have you to the following statement: "The first business of the teacher is to fit the boy and girl for earning a livelihood. This means for the children, first of all, an accurate and rapid acquisition of the processes of reading, writing, and arithmetic"?

OUTLINE FOR MARCH.

The work for March will be a continuation of the subjects of imitation and suggestion, and will include dramatic play on the side of pedagogy. Habit, memory association, and attention will be discussed.